APRIL 1986

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Getting closer to Detroit buys

Executive panel: women in purchasing

TRANSPORTATION

Buyers riding on a smoother road

POWER TOOLS

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Vol. 30 No. 4 April 1986

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PW PREDICTS

Robert S. Reichard, executive editor

Inflation slips on the oil patch

New computer analyses confirm that the recent price slide in petroleum costs will dampen inflation significantly—reducing not only the overall rate of increase, but also in key specific industrial sectors.

Take a look at the macro picture first. Wharton Econometrics now predicts that producer price averages will rise only 0.9% this year. That's almost half of the 1.6% predicted just a few months ago. And the downward adjustment now predicted for 1987 is even bigger. The Philadephia-based economic consulting firm's new estimate of 1.9% for next year is nearly a full point under the 2.8% pre-oil-cut projection.

As expected, the impact on individual products will be uneven. The Wharton breakdown suggests that the biggest deceleration will be in the energy sphere, where a previously projected 1.4% advance for 1986 is now turning into a near-1% decline. And a similar decline is anticipated in the petroleum-dependent chemical industry.

On the other hand, the substantial improvement in demand seen for other sectors as transportation equipment, machinery, and textiles and apparel may well offset the downward tug of lower oil tags. That's why Wharton's equations point to fractional price acceleration in all three of these areas.

It should also be noted that the above inflation estimates assume an $18/bbl quote through 1987. If petroleum tags average out below $18 (some energy analysts do not think these quotes will rebound very quickly from current under-$15/bbl levels), then general price deceleration could turn out to be even more substantial—both for the current year and for 1987.

And Wharton isn't alone with this rosy forecast. Projections by Data Resources Inc. (DRI), another big economic consulting firm supplying forecasts to *PW* on a regular basis, tell much the same story. DRI sees overall industrial producer prices rising only about 1.1% this year, and 2.8% in 1987.

DRI's more detailed commodity forecasts, carrying into 1988, are equally optimistic. Only one of the 28 specific categories analyzed is expected to sport more than a 5% price increase this year.

Non-commodity cost pressures are also likely to slacken because of the the oil factor. Interest rate declines have already been set in motion, with average borrowing costs over the current year now expected to be about one point under what they might be otherwise.

The oil impact will probably spill over into the labor arena also. Specifically, lower crude oil will quickly translate into a smaller cost-of-living index rise—thereby reducing pressure for big new wage hikes.

Under the new ground rules, hourly earnings increases are now put at only 3% or slightly higher.

Computers

Computer prices are heading for more sharp declines this year and probably for the rest of the decade.

A new Computer and Business Equipment Manufacturers Association (CBEMA) forecast indicates that microcomputers (those carrying suggested retail prices ranging from $1,000 to $15,000) will decline another 16% this year—bringing the average quote down to $2,995.

This is on top of the dramatic declines of the past decade—when the average machine tumbled a whopping 76%—from $15,000 in 1975 to only $3,553 last year.

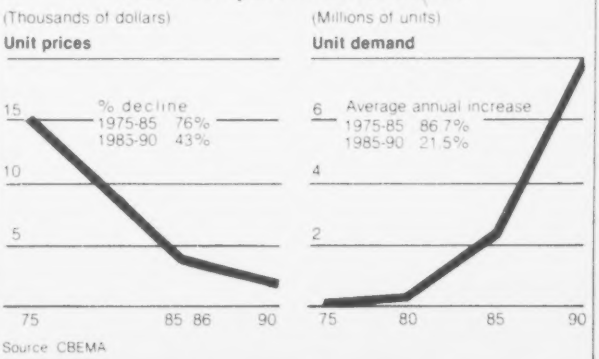
And that isn't the end of the line. By 1990 further declines will drop price averages to only $2,035—32% under last year's levels.

Demand is also expected to continue showing strong gains. The CBEMA study puts average annual gains over the 1985-90 period at 21.5%—about five times as fast as the general economy is expected to grow. In volume, that means 3.1 million micros will be shipped this year—a figure which could grow to over eight million by 1990.

The 1986-90 average annual advance is somewhat under the phenomenal 86.7% average annual growth rates of the past decade, but some decline has to be expected as the base to which you compare growth gets larger and larger.

A better indication of ever-increasing acceptance: Some 27 million microcomputer units will clear the market between 1986 and 1990. That is more than five times as may as were sold during the past four years.

Micro computer market trends



Source CBEMA

PW PREDICTS

Copper

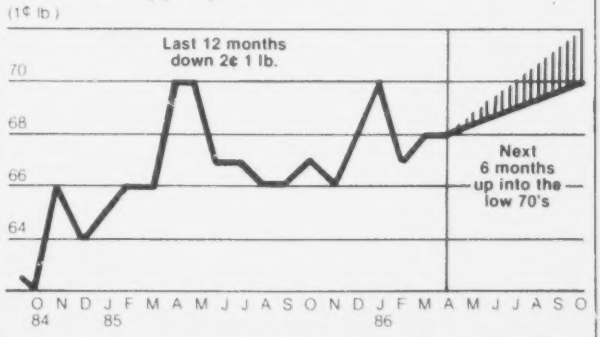
CURRENT SITUATION: The red metal still seems unable to sustain a rally. Prices have been zig-zagging in the 65-70¢/lb range for over a year now. **Major depressants: sluggish demand and continued strong production by Third World countries** who control about 40% of the Free World supply. But whatever the reasons, U.S. firms are taking it on the chin—tags remain several cents under production costs and 40% of all U.S. mines are shut down.

DEMAND: Things are looking up—thanks to the oil price slide which could boost domestic use 1-2% this year. Money previously earmarked for gasoline and home heating oil will now be funneled into increased demand for autos, appliances, and other items requiring copper. Look for a small gain in Free World demand for the same reason. **Long-term demand, however, looks less than buoyant as fiber optics and increased use of aluminum radiators cut into the metal's markets.**

SUPPLY: Overcapacity is likely to remain pervasive, but trends suggest a better near-term balance as aboveground stocks decline. Increasing dependence on overseas supply is also likely—domestic output of primary refined copper is expected to be off about 4% this year. Consequently, imports will continue to increase and could account for more than 35% of consumption by the end of the decade.

PRICE OUTLOOK: Improved demand and smaller stock overhangs suggest some near-term firming. But boosts are likely to be quite modest. A recent government forecast calls for a 4% advance for 1986 as a whole. Look for a low-to-mid 70s quote by fall or winter. **Longer term, the prognosis is for very little firming, for as tags rise, shut down facilities are likely to come back on stream.**

Producer copper prices

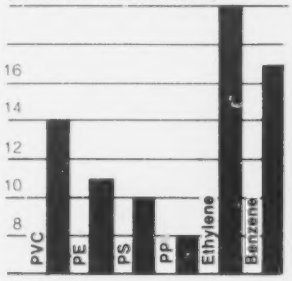


Steel

Sheet prices are firming, as buyers become increasingly nervous about an August strike. And more boosts are possible—with this key steel product group scheduled to move up another 3% in early May. But many big users protected by long-term pacts will escape the new moves. Service centers are expected to bear most of the upward thrust. Elsewhere, hot-rolled bar has moved up $25-30/ton. But major weakness has reappeared in oil country tubular goods as falling demand for oil drilling drops prices as much as 75% under official list levels.

Plastic resin prices

(% decline end of 85 to 88)



Source DRI

Plastic resins

The sharp oil price drop should put strong downward pressure on most commodity resins over the next few years. Thus a new DRI study (which assumes that oil will finally settle around $18/bbl) sees these price declines by 1988: PVC (-14%), polyethylene (-11%), polystyrene (-10%), and polypropylene (-8%). These figures are further premised on even bigger drops in key feedstock prices —ethylene (-20%) and benzene (-17%).

Aluminum

The slow price upcreep of recent months is continuing. Producer ingot now goes for 60¢/lb—with 6063-type also up 2¢/lb (to 68¢/lb). Other bullish signs would have to include, 1) a recent jump in the incoming order rate, 2) Free World usage which will outstrip demand for the second consecutive year, and 3) the drop in global stocks from 2.6 million metric tons a year ago to under 2.2 million today. Add in some nervousness about a possible strike this spring and prices could inch up another few cents. But that's about it—any big increase could lead to potline shutdowns.

Electronic components

Some firming is noted in the 256K and 64K EPROM market with quotes up an average of 25% from November 1985 levels. One big firm, for instance, now asks $2.50 for its 64K device (vs. $2 in late 1985) and 256K types are moving at $5 (vs. $3 a few months ago). No increases, however, have been announced on the more powerful 512K models. In the meantime, overall demand for semiconductors is looking up. In-

Paper and products

CURRENT SITUATION: Markets are beginning to firm after last year's sluggish performance. A stronger 1986 is suggested by growing backlogs—as the pace of incoming orders quickens. Corrugated shipments look better—early 1986 figures are up almost 5% above year-earlier levels. **Inventories have dropped and prices are edging higher.** Producers have recently posted boosts in 1) market pulp (up $30-50/ton), 2) linerboard (up $30/ton to $290/ton), and 3) many commodity grades of white paper.

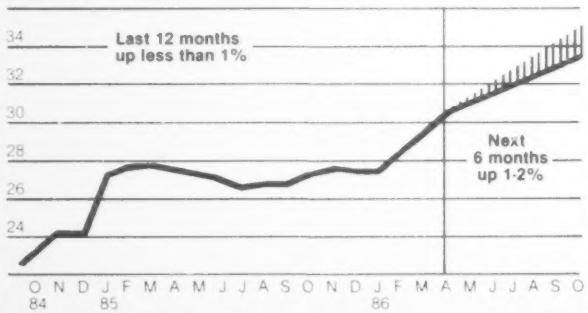
DEMAND: An improving general business outlook promises gains in most sectors. Total paper and board production could rise 2.5-3% this year—to nearly 69 million tons—thanks to a decline in imports and some customer inventory replenishment. Product-by-product projections: corrugated boxes (up 2-2.5%), folding boxes (up 2-3%), setup boxes (up 1-2%), uncoated free sheet (up 4%), and coated paper (up 3%). **Overall long-term prognosis is fairly bullish—look for average yearly advances of 2.5-3%.**

SUPPLY: There should be enough to go around. The American Paper Institute projects that modest demand increases will be largely offset by a 2% capacity increase this year and a 2.5% increase in 1987. Operating rates will remain under preferred levels—with these projected 1986 rates: unbleached kraft linerboard (91%), recycled paperboard (86%), coated papers (87%), uncoated groundwood (94%), and uncoated free sheet (92%).

PRICE OUTLOOK: More-than-ample supply should limit near-term advances. Overall paper and paperboard increases should be up only 1-2% over the next two quarters—**with year-end levels running 1.5-2% above late 1985 levels.** One exception is lightweight coated papers where prices should remain the same because of capacity additions.

Paper & Product Prices

(Index 1967 = 100)



Stat, a major consulting firm, estimates that dollar sales will increase this year as follows: 2% (1Q), 7.8% (2Q), flat (3Q), and nearly 10% (4Q).

Zinc

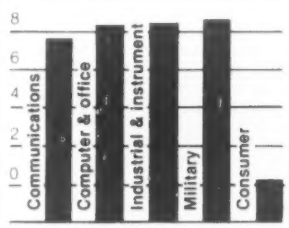
Lists are just the starting point for negotiation as some buyers pay less than 30¢/lb for their metal in recent weeks. One reason: Many of the publicly acclaimed production cutbacks of late last year have been all but forgotten. The current glut is spotlighted by recent estimates that put worldwide refined metal output at 4.93 million metric tons in 1985—well above consumption which is estimated at 4.65 million tons for the same period. All of the above and expectations of only a modest 3% increase in U.S. consumption (to 915,000 short tons) should keep prices under pressure.

Electronic equipment

A tolerably good year seems to be shaping up on the demand front. So says Henderson Ventures, a major electronics consulting firm. Its forecast: Overall sales should increase about 7.9% this year (about one percentage point above 1985) with slightly larger increases seen for three key sectors: 1) computer and office, 2) industrial and instrument, and 3) military. Next year promises to be even better. A big

Electronic eqpt demand

(% increase in 1986 sales)



Source: Henderson Ventures

14%-plus gain in the computer and office segment of the market could push the overall advance to nearly 11.4%.

LDPE

A recently posted 3-4¢/lb advance in low- and linear low-density polyethylene (LDPE) is meeting with only limited market acceptance, primarily because of falling feedstock costs. Result: Transaction prices are up only 1¢/lb with the liner grade LDPE fetching only about 32-33¢/lb and LLDPE (butene type) only 29-30¢/lb. Demand isn't moving up all that fast either with only about a 3-4% increase anticipated for the current year.

PVC

A second round of 1986 price hikes (pushing market quotes up another 3¢/lb) could be in trouble. Reasons: rising pipe inventories. As such, prices are likely to remain in the current 29-30¢/lb range for at least another month or two. Also suggesting restraint over the longer pull are lower feedstock costs and less-than-sensational demand gains. On the lat-

Dollar's dip pushes import tags

The gradually weakening dollar is finally beginning to affect import prices. A new government rundown finds that costs of incoming goods jumped 1.8% in the last three months of 1985. (see chart).

The biggest increase occurred in the transportation and capital equipment sectors where price averages rose a significant 3.6% from third quarter 1985 levels. The reason is that a substantial portion of imported goods in this category came from countries whose currencies have appreciated the most against the dollar.

The largest price increase (4.5%) occurred in road vehicles and parts. And office machinery, a category which experienced substantial price drops over the previous year-and-a-half, jumped by 3.8%.

Other significant advances were recorded for metalworking machinery (4.1%), industrial machinery (3.9%), specialized machinery (3.3%), and electrical machinery (2.3%). Telecommunications equipment remained relatively unchanged as price decreases in parts offset price increases in equipment.

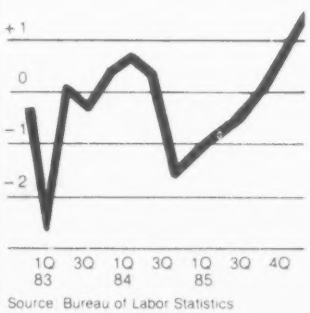
Miscellaneous manufacturing—including professional, scientific, and control instruments—jumped 3.6%. Also up—by 4.2%—were photo equipment, optical goods, and watches. Smaller gains were noted for footwear, furniture, and travel goods.

The weaker dollar has also halted the slide in crude material prices. They were virtually unchanged during the latest three-month period. That's in sharp contrast to the declines of the previous quarters which have dropped average quotes in this sector close to 8% under year-ago levels.

Fuel and related products inched up on the survey only because government analysts hadn't yet factored in the crude oil price tumble. When the next survey is taken, it will reflect a major drop here.

Import price trends

Overall prices are rising
Percent change



Particularly in these areas
(% increase over last 3 months)

Textile 1.3
Fasteners 0.5
Electrical motors & gen. 2.8
Textile machinery 3.5
Printing machinery 6.7
Metalwork machinery 4.1
Industrial machinery 3.9
Pumps & compressors 1.6
Mech. handl. eqpt. 7.3
Bearings 1.1
Office machines 4.7
Electrical machinery 2.3
Autos 5.0

Source: Bureau of Labor Statistics

ter score, average consumption this year is expected to rise by only 3-4%—thereby keeping operating rates in the relatively low 80% range.

Cotton

A new government program (assuring that domestic cotton will be competitive with the world price) could knock at least 10¢/lb off the current 60¢/lb-plus quote by next fall. The expected downtrend is also beginning to put pressure on manmade fibers and a broad range of fabrics. Thus, 1) overall manmade fiber prices now run some 4% under year-ago levels, and 2) convertors are holding back on grey goods purchases, hoping that lower fiber costs will force a decline on the fabric level by as early as late spring or summer.

Natural gas

Look for falling oil tags to put new downward pressure on competing gas. Indeed, if oil remains at current levels, the basic pipeline gas purchase price could drop down to $1.93 per thousand cubic feet this year, off a resounding 25% from 1985. And spot prices could drop even lower--to near $1.65. A persistent glut adds to the overall weak price outlook. Specifically, current use is put at only 18 trillion cubic feet a year, about 2.5 billion under capacity. Moreover, there's the added supply from Canada where producers are said to be formulating an aggressive pricing strategy.

Cobalt prices
(cents/lb.)

1977 $5.58	1982 $8.56
1978 $11.53	1983 $5.76
1979 $24.58	1984 $10.40
1980 $25.00	1985 $11.25
1981 $19.73	1986 $9.50

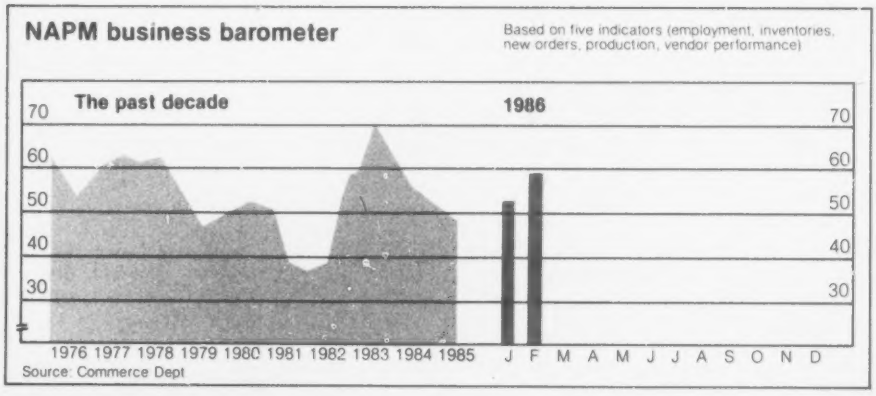
Cobalt

Prices are dropping—the metal has moved into the low $10.50/lb range, some 9% under year-ago levels. Nor is that the end of the line. By-product producers do not want to hold onto inventories and the market seems headed for a major oversupply situation. In any case, be prepared for more price weakness—with spot business likely to fall an additional 20% by late summer when the metal could be going for as little as $8-9/lb.

Lead

No near-term rally seems possible, especially with the new battery-buying season at least four months off. Rising U.S. stocks also suggest weakness. Ditto, lackluster U.S. demand which could fall as much as 3% this year to only 1.2 million short tons. Upshot: Prices are likely to back and fill in the low 18-19¢/lb range through spring—a far cry from the 32¢/lb quote that prevailed as recently as July 1984. Moreover, sluggish long-term growth (put at only 1% annually here in the U.S.) suggests that the weakness could spill over into 1987 and maybe even 1988.

BUSINESS DATATRAK


NAPM business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1986
70
60
50
40
30
1976 1977 1978 1979 1980 1981 1982 1983 1984 1985
J F M A M J J A S O N D
Source: Commerce Dept

KEY ECONOMIC TRENDS

Spending plans rise on market

Solid business gains in the next few quarters seem certain—given such powerful forces as falling interest rates, a rising stock market, sharply lower oil quotes, and a declining dollar.

The interest rate slide is bound to stimulate demand because lower borrowing costs have traditionally spurred purchases by both consumers and business.

As for the stock market, recent studies show that anywhere from 3% to 9% of gains accumulated in a bull market get translated into additional spending. In dollars, this means about a $13-40 billion jump in consumer outlays over the next year.

And the plunge in oil prices should spur industrial production this year. Estimates call for an increase of 1.5% over what it would have been without the drop in oil. And industrial prices should decelerate by 1%.

Consider also the declining dollar *vis-a-vis* other currencies. While the impact of the 30% deterioration in the trade-weighted value of our money over the past year has been slow in coming, there is always a lag here. By year end, the shift should mean some reduced import pressures and probably a noticeable increase in our export totals.

Consumer spending (the biggest factor in our GNP) continues to look rosy. Thus, buying intentions (see chart) remain far above 1985 levels.

A look at the details here shows that 8.6% of the families surveyed now plan to buy a car over the next six months. More significant, some 4% plan on buying a home—the highest percentage in years. This, in turn, should help spur appliance and home furnishing sales.

Another major plus factor is the continuing low level of inventories. In the bellwether durable purchased materials sector (of crucial importance to industrial purchasing executives), the stock/sales ratio remains near 50.

The implication is clear: The continuing increases projected in final consumption will require new orders rather than any continuing inventory drawdown.

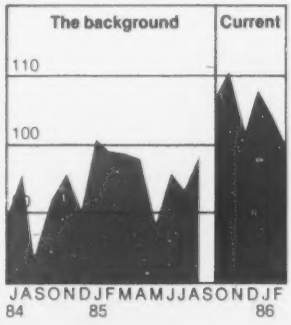
Even the heretofore weak capital goods sector doesn't seem that bad. While orders in this area continue to be volatile, they remain well above last year's disappointing level (see chart).

Modest bullishness here is further suggested by the Conference Board's latest capital appropriations series (a lead indicator of capital goods orders and eventually capital goods spending). Figures here rose nearly 14% over the latest three-month period.

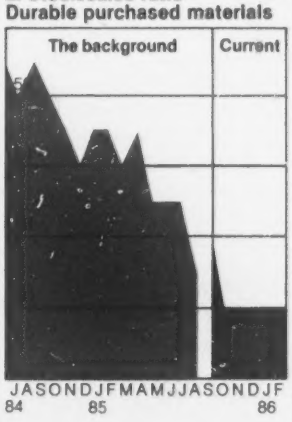
Not surprising, the same survey finds that the nation's manufacturers

Leading indicators

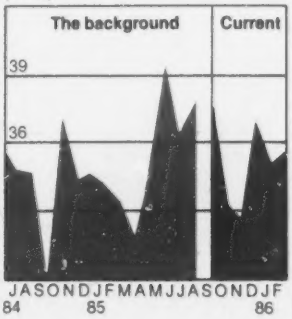
1. Consumer buying index
(Index:1985 = 100)



2. Stock/sales ratio
Durable purchased materials



3. Capital goods orders
(Bil. $)



are planning about an 8% increase in actual capital outlays this year—up significantly from the 5% figure recorded a few months ago when a similar survey was conducted.

Put all this into perspective, and you can see why the NAPM business barometer remains solidly in the plus column. Note on the chart that the bellwether yardstick of near-term activity has been above the neutral 50 mark for six months running—a sure sign that the current business upturn still has a long way to go.

Driving up costs

It seems hard to believe, but the average cost of owning and operating a new car now comes to nearly 50¢/mile.

The above estimate—supplied by Hertz—assumes a vehicle is driven 10,000 miles a year and is held for five years. But the figures can vary significantly—depending on the size of the auto chosen.

Here are the cost breakdowns supplied by Hertz: subcompact (40.9¢/mile), compact (47.6¢/mile), midsize (47¢/mile), intermediate (52.2¢/mile), and standard size vehicles (63¢/mile).

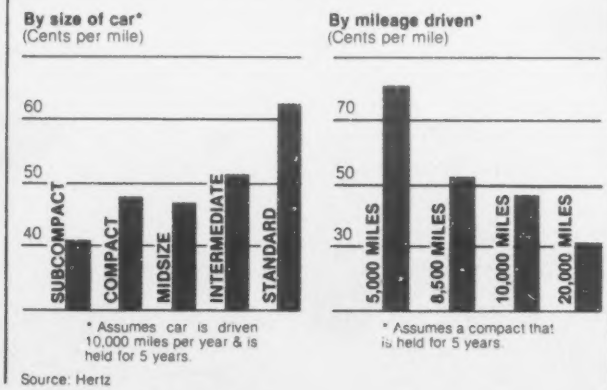
Significant cost variations are also possible by changing the number of years a car is held before being traded in. If you keep a vehicle for 10 years instead of five years, for example, you can shave almost 20% off cost/mile outlays.

Similarly, driving a car more intensively (while holding the car for five years) results in big savings. Example: The compact which costs 47.6¢/mile to drive 10,000 miles would cost only 30.6¢/mile if driven 20,000 miles per year.

Other key findings of the new Hertz study:

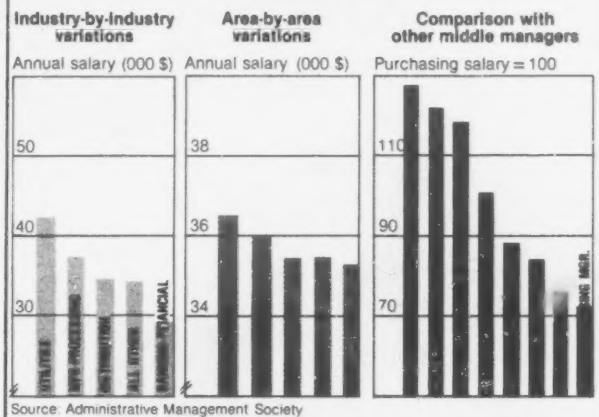
- Three-fourths of all outlays can be traced back to fixed costs (depreciation, interest, insurance, licenses, and fees). Only 25% goes for variable expenses such as gasoline, oil, maintenance, and repairs.
- The average new car is now kept 5.2 years—compared to only 3.6 years in the early 1970s. The average age of all vehicles on the road is now 7.6 years.
- Used cars, on average, will cost you about 40% less to own and operate.
- Parking and tolls (excluded in all of the above cost estimates) can add 10-40¢/mile onto operating costs in some major metropolitan areas.

Car driving costs



Source: Hertz

Middle management purchasing executives: A salary profile



Source: Administrative Management Society

A tale of paychecks

There's good news and bad news for purchasing managers.

On the plus side, the average salary increase received last year came to 8.2%—one of the highest increases noted for middle managers. But somewhat less satisfying is that the actual level of pay ($35,700 for the typical PM) ran well under those noted for plant, sales, and personnel managers.

- **Industry breakdown:** PMs working in utilities tend to fare better than their counterparts in manufacturing/processing industries—with their $42,800 average salary running nearly 14% above PMs working in factories. Banking/insurance/financial PMs are generally at the low end of the scale—earning only about $29,500 a year.
- **Regional breakdown:** Where you work seems to make very little difference on how much you make. Less than four percentage points separate the high $36,500 commanded by PMs in the East Central portion of the country and the $35,200 earned by East Coast PMs.
- **Job comparisons:** The typical plant manager's salary was 28% more than that of a PM. And sales and personnel managers topped purchasing managers by 21% and 16% respectively. On the other hand, many middle managers make considerably less than PMs—28% less for word processing managers and 24% for payroll managers.

Another important finding for all middle managers: More than half of the U.S. companies surveyed (54%) grant managers salary increases solely on the basis of merit. The average merit increase in 1985 was about 5.6%. Another sizeable increase of 5.5% is planned for 1986.

CURRENT PRICES

Price plunge sets record for U.S. index

The "energy effect" is now beginning to make a big difference in overall price yardsticks. Uncle Sam's bellwether industrial price index plunged a resounding 1.4% in the past month, making it one of the largest declines in history.

As might be expected, the fuel and power sectors spearheaded the decline—dropping off by more than 8% over this latest 30-day period. And even this doesn't tell the whole story. Even more precipitous declines were noted in such individual areas as fuel oil (off 13.8%) and gasoline (off 11.3%). Equally sharp falloffs hit home heating oil, kerosene, diesel fuel, jet fuel, and liquid petroleum gas.

There was some modest upcreep in both finished lubricants and electric power. But these should prove only temporary, with weakness also expected to spill over into these sectors before too long.

Aside from energy, however, the price pattern remains basically flat. In the capital equipment area, for example, the decline in truck prices (off about 1% last month) have been offset by scattered increases in printing trades, food, and service industry machinery lines.

Similarly, there were offsetting changes in chemicals over the last month, as organics moved up and inorganics moved down. But the organics advance could prove temporary as the impact of lower crude oil filters through to major petrochemical feedstocks. And the same is true of plastic resins where recent price increases consumed the offset by lower costs for ethylene, benzene, and other feedstocks.

Elsewhere, the 0.7% reduction shown for steel prices over the latest month is unrealistic. Reason: Government price collectors are picking up the new lower lists being posted but not the more important narrowing of available discounts. The fact is that on a "transaction" basis, prices have actually been rising.

In the meantime other metals continue to show little overall change. True, aluminum is still edging up. But softness persists in other key non-ferrous sectors such as lead, zinc,

This month's breakdown

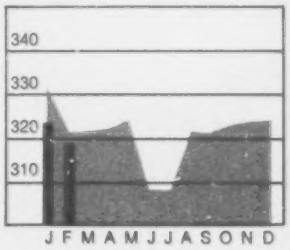
	Latest level (Feb.)	% change from: Month ago	Year ago
Bearings	353.5	0.0	2.2
Bolts, nuts, etc	278.2	0.9	−0.3
Chemicals, inorganic	295.1	−1.2	−1.8
Chemicals, organic	360.9	0.7	2.5
Concrete products	325.6	0.0	3.5
Corrugated cartons	264.1	−0.2	−8.2
Cutting tools, small	289.4	0.3	1.4
Electric lamps (bulbs)	349.3	0.8	1.7
Electronic components	199.3	0.2	0.3
Fans and blowers	362.1	0.1	1.2
Foundry and forge products	365.2	0.4	0.7
Fuel oil (residual)	756.5	13.8	−31.7
Furniture, commercial	315.0	0.0	4.1
Gasoline	472.8	−11.3	−6.8
Glass, flat	229.8	0.0	4.0
Glass containers	387.5	0.2	6.3
Gypsum products	362.2	0.5	5.2
Hand tools	380.8	−0.1	2.6
Hand tools, power driven	234.5	0.0	1.5
Industrial furnaces	395.5	0.1	3.3
Integrating and measuring instruments	235.7	1.0	1.7
Internal combustion engines	348.9	0.2	2.7
Lubricating oil	380.0	1.1	2.8
Lumber millwork	311.8	0.0	0.1
Material handling equipment	295.3	−0.1	−2.4
Metal containers	361.2	0.7	−2.4
Metal mill shapes (nonferrous)	306.7	−0.7	−2.4
Metal tanks	305.9	0.1	−0.1
Motors and generators	349.6	0.0	−0.1
Motor trucks	306.0	−0.8	3.3
Office and store equipment	155.2	0.5	1.0
Paperboard	262.7	−0.5	−8.1
Paper boxes and shipping containers	266.3	0.0	−3.8
Paper office supplies	237.1	0.2	−2.6
Paint	278.9	−0.2	1.5
Plastic resins	301.1	1.3	−1.9
Precision measuring tools	265.3	0.1	3.3
Pumps and compressors	357.2	0.0	0.9
Refractories	373.0	0.0	1.9
Rubber belts and belting	339.4	−0.1	−4.4
Scales and balances	230.6	0.0	0.2
Steel products	345.2	−0.7	−5.3
Switchgear	282.6	0.2	1.0
Textiles, synthetic fibers	150.5	−0.4	−4.4
Textiles, gray fabrics	151.5	−0.1	−0.7
Tires and tubes	237.3	0.7	−0.9
Transformers and power regulators	234.1	0.5	0.3
Welding equipment	298.9	0.0	2.0
Wire and cable	206.4	0.0	1.5

Industrial prices

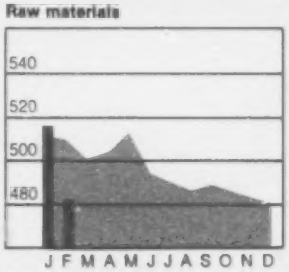
(Index: 1967 = 100)

1985 ■ ■ 1986

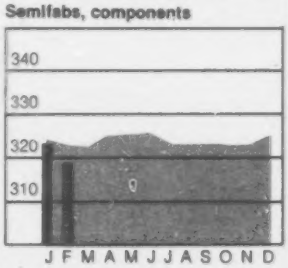
All items



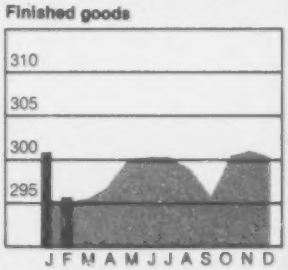
Raw materials



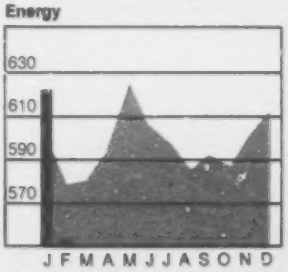
Semifabs, components



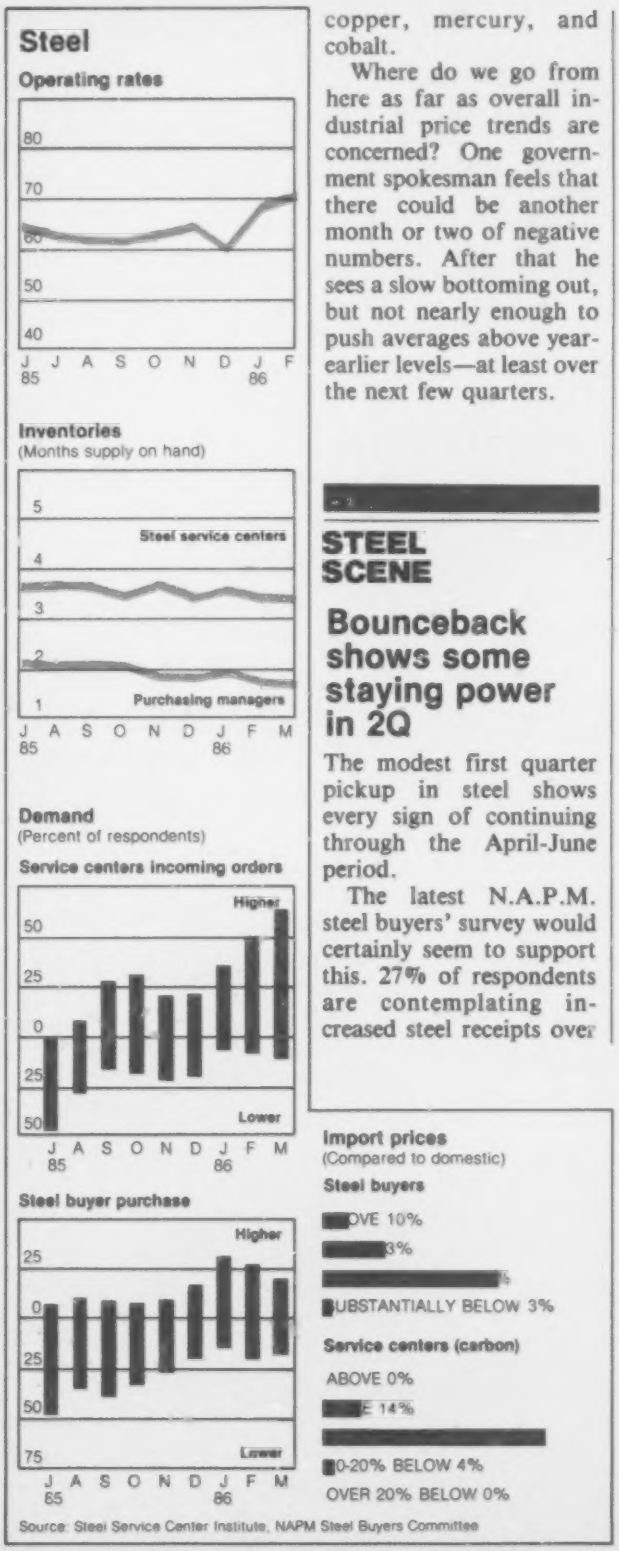
Finished goods



Energy



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

copper, mercury, and cobalt.

Where do we go from here as far as overall industrial price trends are concerned? One government spokesman feels that there could be another month or two of negative numbers. After that he sees a slow bottoming out, but not nearly enough to push averages above year-earlier levels—at least over the next few quarters.

STEEL SCENE

Bounceback shows some staying power in 2Q

The modest first quarter pickup in steel shows every sign of continuing through the April-June period.

The latest N.A.P.M. steel buyers' survey would certainly seem to support this. 27% of respondents are contemplating increased steel receipts over the next few months—almost twice as many as the 17% who feel that some additional cutbacks may be in order.

This marks the third straight month where pluses have predominated—a major reversal from the seven previous months when a solid string of negative receipt expectations were recorded.

This more bullish demand outlook is confirmed by distributors responding to the latest Steel Service Center Institute (SSCI) survey. Indeed, the gains here actually seem to be accelerating. Thus 65% now anticipate an increase in incoming orders over the next three months—compared to only 50% the previous month and just 37% the month before.

The optimism is perhaps best summed up by SSCI president Andrew G. Sharkey who says the outlook for his group appears to be good for the next 12-24 months. He notes that key steel markets should be relatively strong, especially in the automotive sector (cars, trucks, and minivans).

Sharkey adds that on a product-by-product basis, sheet and stainless products have been performing best. Other product lines, including structurals, plates, bars, and tubing—leave a lot to be desired—probably a reflection of continued sluggishness in traditional capital goods markets.

What does it all add up to as far as overall steel demand for the current year is concerned? *PW* talks with mill executives and metal analysts suggest that the domestic industry will probably be able to ship about 73 million tons of mill products this year—somewhat more than projected at the beginning of the year, though not nearly enough to tax the industry's capacity.

The latter can best be appreciated by the fact that the industry is still operating at under 75% of its potential—and this at a time that demand has been fairly brisk.

Not surprisingly, nobody seems too worried about supply availability. Only a scattering of shortage worries are mentioned by buyers, and these few are generally limited to coated sheet.

This ready availability is also helping to keep inventories quite lean. Thus steel buyers at latest report were holding only about a one and three-quarter month's supply. This represents a new low and is close to half a month under the year-earlier figure.

Service center inventories have also been edging down and now are just shy of 3½ months. One result: fewer and fewer distributors feel their stock levels are too high—only 25% now vs. 37% in the previous month and 46% the month before that.

Nevertheless, there are still more service centers who feel stocks are too high rather than too low. Implication: Some further paring might still be in the cards.

Also worth noting: Despite the declining dollar, foreign steel is still relatively cheap—probably because boosts in domestic tags have offset the dollar's upward tug on im-

port quotes. In any case, some 86% of queried service centers report price breaks on foreign metal, actually a bit above the 80% figure of the previous month.

And a similar pattern is noted in distributor purchases of stainless. Moreover, one out of three here puts the price gap in the 11-20% range—compared to only about one out of five at the end of 1985.

Again confirmation comes from steel buyers. Here 67% report advantages by going overseas —only a slight decline from the 74-76% range of the previous two months.

Finally, a word about future prices. The overwhelming majority of service centers expect replacement costs to go up over the next six months. But the rise is not expected to be all that great. Three out of every four respondents put the advance in the 2-5% range.

PROCUREMENT STATUS

No shortages as leadtimes hold

The continuing climb in industrial demand seems to be having little or no impact on leadtimes.

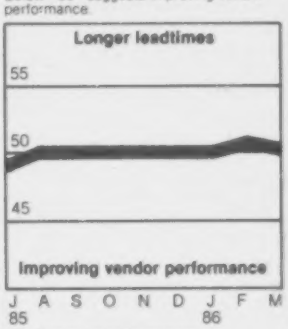
Some items in the electronics and steel sectors have inched out a bit, but these stretchouts have been effectively offset by scattered improvement in other sectors.

PW's exclusive leadtime index is now back in the neutral "50" range.

Monthly procurement status report

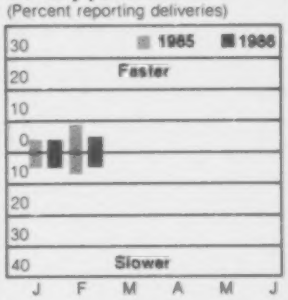
Leadtime index

A "diffusion" index based on 158 key commodities. Above "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.

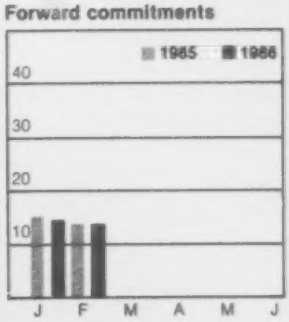


Delivery performance

(Percent reporting deliveries)

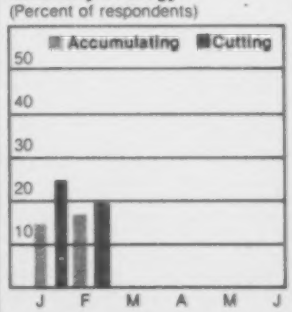


Forward commitments



Inventory strategy

(Percent of respondents)



Source: NAPM

That's actually a slight improvement over the "51" readings of recent months.

The reasons for the continuing good performance are obvious. Factory capacity still remains far in excess of current needs —the typical U.S. plant is still operating at 81% or less of its capacity and new facilities are pretty much balancing out the impact of slowly rising demand.

The balance of trade factor is also playing a role. Imports exceeded exports by a record $124 billion last year—thereby adding to overall domestic availability.

Buyer-seller coordination is still another factor cited by some purchasing managers for improved leadtime performance. The emphasis on just-in-time deliveries has been paying off—with both parties increasingly aware of the importance of having goods arrive on time.

And the goods are arriving on time—judging from the latest delivery performance survey from N.A.P.M. Specifically, the 5% reporting slower deliveries is completely balanced out by a similar 5% in the faster category. This implies that average speed-of-delivery rates have not changed all that much.

Further confirmation that no one is worried comes from the fact that 61% of respondents are now committing 30 days or less in advance for production materials.

For thirteen consecutive months now, no shortages have been reported by N.A.P.M. survey respondents. This ties the previous record of thirteen months from May 1982 to June 1983 when the nation was in the throes of a major recession.

All of the above factors seem to assure continued inventory retrenchment. Thus 20% of survey respondents say they are cutting—outweighing the 17% who are now adding. That stock cutting is still going on at a time of steadily rising production activity cannot be overestimated—it is proof that the situation is still problem-free.

Leadtimes and availability

Chicago: Coated paper leads (now 6 weeks) could ease off. Ditto current 4-5 week waits on offset paper. Elsewhere, drops (with these new weekly leads) are noted for surfactants (½), mill supplies (1-3), and batteries (10-14). But c-r steel sheet has edged out (to 6-8). Ditto h-r bars (to 3-5).

Cleveland: A minor stretchout is reported in polyethylene resins (to 2-3 weeks). Other basically unchanged waits prevail in alloying materials (on demand), hardwood (1-2), softwood (1-3), skids (1-3), waterproof papers (4-5), corrugated cartons (2-3), and 2-ply fiber drums (2).

Los Angeles: Galvanized waits have almost doubled (to 12-14 weeks). Some stetchout is also noted in paints (to 3-5). No change in aluminum tubing (6-8), grey iron castings (8-10), brass castings (4-6), stainless coil (12-14), pumps (10-12), specialty wire (4-6), and paperboard cartons (3-5).

BUSINESS DATATRAK

Houston: High pressure heat exchangers have come in a bit (to 4-8 months). But some plastic resin leads could edge up over the next month or two. Other (unchanged) leads: centrifugal compressors (10-12 months), pumps (4-7 months), corrugated cartons (2 weeks), large transformers (4-6 months), and motor control centers (3-6 months).

Philadelphia: Steel leads are holding despite a modest demand pickup. Other prevailing leads (in weeks): copper alloy sheet and plate (6-8), standard valves (3-4), standard pumps and valves (8-10), standard bearings (stock to 4), aluminum products (4-6), and plastic sheet (2-3).

Pittsburgh: Manganese has stretched out to 3 weeks and should remain tight until May. Other typical leads: most other alloying metals (2), polyethylene and PVC resins (5-6), paint (4-5), seals (1-2), steel strapping (6-8), plastic bags (3-4), folding boxes (3-4), and laminating papers (6-9).

Leadtimes (in weeks)

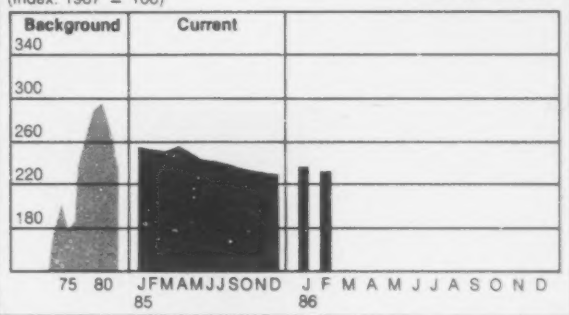
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4	4	4
C-R Sheet (Chgo)	7½	5½	6½
Plate (Phil)	3½	3½	3½
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	5½	5½	5½
H-R Bars (Chgo)	4	3	3
Cold-Drawn Bars (Phil)	5½	5½	5½
Galvanized (LA)	13	7	13
Galvanized (Chgo)	6	7	7
Structurals (Chgo)	4½	4½	4½
Structurals (Hous)	17	17	17
Tubing (Phil)	5½	5½	5½7
Grey Iron Castings (LA)	9	9	7
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	11	11	15
Motors (Phil)	10	10	11
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	9	9	10
Relays (Chgo)	15	15	15
Resistors (Chgo)	9	9	10
Resistors, Wirebound (Phil)	5	5	8
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	1½	1½	3
Plywood (Chgo)	1½	1½	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	2	2	1
Softwood (Phil)	⅛	⅛	⅛
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	4	1½	1½
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	2½	2	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2	2	3
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	2½	2½	2½
Cartons, Corrugated (Hous)	2	2	2
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	6
Shrink Film (Clev)	1	1	1
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	1	1	1
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	2½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	13	11	11
Aluminum Plate (Chgo)	12	10	12
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	12	9	11
Brass Castings (LA)	5	5	5
Brass Rods (Chgo)	6½	6½	7½
Brass Sheet (Chgo)	4	4	1
Brass Tube (Chgo)	7	10	10
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	7	7	7
Copper Tube (Phil)	5½	5½	4½
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	2	2	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	2	2	2
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	48	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	5	5	5
Fasteners, Std. (Phil)	1½	1½	2
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	21
Heat Exchangers, Hi-pressure (Hous)	26	28	37
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1½	2½	2½
Pumps (Hous)	24	24	24
Pumps (LA)	11	11	11
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

(Index: 1967 = 100)

Latest month	233.7
Month before	236.4
Year ago	253.1



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel structural shapes, Los Angeles, cwt	23.90	23.90	25.10
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	23.95
Steel, bars, Pitts., cwt.	23.95	23.95	23.95
Steel, bars, C.R., Pitts., cwt	31.00	31.00	29.00
Steel, plates, Pitts., cwt.	18.25	18.25	23.25
Steel, plates, H.R., Pitts., cwt.	18.25	18.25	23.25
Steel, sheets, C.R., Detroit, cwt.	23.15	25.15	27.10
Steel, strip, C.R., Chi., cwt.	36.18	36.18	35.30
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	.590	.563	.513
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.35	5.35	5.35
Brass, red, 85%, [sheet], lb.	1.32	1.30	1.27
Brass, yellow, [sheet], lb.	1.27	1.25	1.22
Cadmium, ton lots, lb.	1.00	1.00	1.25
Copper, electrolytic, wire bars, refd., lb.	.68	.67	.64
Copper sheet, over 24 in., lb.	1.41	1.39	1.36
Lead, common, N.Y., lb.	.18	.18	.17
Magnesium, pig ingot, [99.8%], lb.	1.53	1.53	1.48
Mercury, 20 fl. lots, N.Y., fl.	240.00	250.00	304.00
Molybdenum, oxide, dealer, lb.	2.75	2.70	3.58
Nickel, cathode, dealer, lb.	1.90	1.88	2.32
Platinum, dealer, oz.	403.00	353.00	269.00
Silver, N.Y., oz.	5.56	5.91	5.75
Tin, Straights, N.Y., lb.	N.A.	N.A.	5.60
Zinc, Prime West, East St. Louis, lb.	.31	.34	.45
Zinc, die casting alloy, No. 3, lb.	.415	.415	.515
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	850.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.35	16.15	16.25
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	495.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.222	.236	.361
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.045	1.045	1.030
Cotton middling, 1", N.Y., lb.	.620	.600	.620
Printcloth, 48", 80x80, N.Y., spot, yd.	.64	.66	.68
Army duck, 37", 13 oz., yd.	1.48	1.50	1.96
Blended printcloth, 64", 78x54, yd.	.73	.75	.74
20s combed yarns	2.05	1.95	1.95
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	.395	.395	.455
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal.	.93	1.05	1.23
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	.58	.58	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.91	.91	.86
Methanol, snty., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.52	.52	.54
Naphthalene, crude, tanks, lb.	.22	.22	.22
Phthalic anhydride, tanks, lb.	.270	.270	.305
Polyethylene resin, low density liner film grade (market place), lb.	.32	.31	.28
Polypropylene, homopolymer grade (market price), lb.	.36	.35	.33
Polystyrene, general purpose grade (market price) lb.	.35	.35	.34
Polyvinyl chloride, pipe grade (market price) lb.	.29	.26	.31
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.26	.26	.26
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	157.50	157.50	157.50
Sulphuric acid, 66%, commercial, tanks, ton	66.86	66.86	56.85
Titanium dioxide, anatase, reg., carlots lb.	.73	.73	.69
Xylene tanks, gal.	1.36	1.36	1.26
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	305.20	303.90	303.15
Lumber 2x2 pine, mbf, cl	296.65	294.95	301.70
Plywood, plyform, ¾", msf, cl	566.55	567.95	569.65
Plywood, ¾", msf, cl	375.05	377.00	375.35
Cement, bulk, ton, tl	66.07	65.92	64.46
Sand, ton, cl	6.42	6.41	6.20
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	48.21	47.14	47.56
Crushed stone, 1½", ton, cl	7.84	7.82	7.52
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.82	0.82	0.79
Gypsum sheathing, ½"x1"x8", msf, tl	210.17	207.69	206.69
Brick, common, per thousand, tl	185.71	184.06	179.89
Asphalt paving, AC-20	172.31	174.14	174.64
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.07	7.14	7.19
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	12.25	14.00	25.50
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	19.00	22.50	31.25
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	.455	.625	.785
Gasoline, 94 oct., reg., Chi., tank car, gal.	.398	.578	.740
Heating oil, No. 2, Chi., bulk, gal.	.440	.630	.730
Heating oil, No. 2, N.Y., bulk, gal.	.605	.545	.808
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.50
Jet kerosene, gal.	.468	.520	.748
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	.330	.430	.365
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	74.00	77.00	92.00
Steel, No. 1 hvy., dlvd., Chi., ton	73.00	76.00	84.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	.605	.575	.545
Copper, No. 2, East, wholesale, dlvd., lb.	.525	.505	.460
Brass, red, East, wholesale buy, dlvd., lb.	.565	.535	.505
Brass, yellow, East, wholesale buy, dlvd., lb.	.300	.290	.340
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.375	.355	.340
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.400	.370	.360
Zinc, old, East, wholesale buy, dlvd., lb.	.15	.15	.14
Lead, clean solids, East, wholesale buy, dlvd., lb.	.10	.10	.09
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	10.00	10.00	20.00
Paper, old corrug. box, dlr., N.Y., bon	10.00	10.00	10.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	.11	.12	.12
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	.13	.14	.30

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Photo courtesy of CSX Corp.

Among the innovative service concepts inaugurated by the CSX transportation units is the double-stack intermodal train, as shown here crossing Bay St. Louis on a dedicated Seaboard System Railroad run between Savannah and New Orleans.

Ton-miles to go before any real hikes

The buyers' market in transportation looks like it still has more time to run—not only through the current year, but well into 1987.

Certainly all factors point that way. They include excess carrier capacity, moderate increases in carrier costs, continued intra- and inter-industry competition, and increased buyer emphasis on contractual agreements and other buying strategies to maximize bargaining leverage.

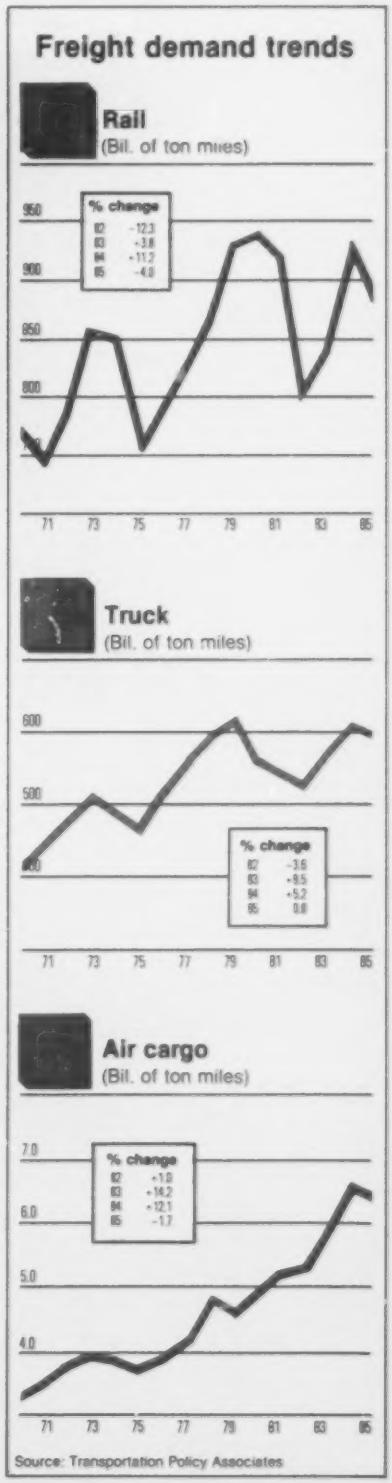
It's not surprising that *PurchasingWorld* readers, responding to a recent nationwide survey, are betting on only a 3% increase in their overall freight bills this year. That's not as low as in 1985 when these same readers predicted only a 1% advance—but it is still very modest. And it is pretty much in line with both the forecasted inflation rate and with the 4% advance recently projected by Wharton Econometrics (*PW*, 3/86, p. 53). Even Wharton's forecasters have hinted that their projection could be on the high side since not all of the ramifications of the oil price decline were factored into their equations.

The surveyed buyers feel even better about the situation—nearly one in three feels he can hold rates at or under 1985 levels. One transportation buyer sums it up by saying, "We're going to be pretty tough on negotiations this year. With oil prices this far down, our carriers will have to present some pretty strong evidence to justify any significant rate increases."

This same buyer admits, however, that there could be some extenuating circumstances, particularly skyrocketing insurance rates for carriers. Also, capital costs have continued to advance. Nevertheless, he is confident that the increase in his own company's freight bill can be held to a few percentage points.

Perhaps the best measure of how well transportation buyers are doing comes from recent statistics which show freight costs now accounting for 6.8% of GNP—down from 8% as recently as 1981. Credit this trend to a combination of factors:

- Freight rates have not risen as much as the general inflation rate over recent years.
- The nation's industrial profile is changing.
- Deregulation has radically altered the industry.
- Buyers are employing better freight



buying strategies.

Here's a breakdown of the supply-demand-cost-price trends for each of the major modes:

■ **Rail:** Relatively modest increases in demand suggest continued moderation. Specifically, ton-miles should rise only about 1-2% this year (to near 910 million ton-miles) —still leaving totals fractionally under the record 935 million peak in 1984.

One of the demand problems faced by rails is that they depend on grain and coal for 50% of their tonnage, and both of these sectors have been disappointing in the last few years. Another factor is the railroads' larger-than-average dependence on smokestack industries which have tended to lag overall gains in GNP during the current recovery.

And the long term prognosis isn't all that bullish, either. A new government forecast, for example, puts the average tonnage rise from now through 1990 at less than 1% a year.

The overall rise in rail freight rates is also likely to be small. One hint comes from a government forecast for operating revenue and revenue ton-miles which suggests only about a 3% rise in 1986—close to what Wharton projected.

■ **Trucking:** Recent demand trends haven't been very robust here. Overall intercity ton-miles dropped 1% last year (to 600 billion). But a fair-sized 6% is anticipated for the current year.

One positive factor in truck demand is the trend toward just-in-time delivery. As companies adopt this concept, they tend to rely more on nearby suppliers. Rails just can't compete with trucks in time, service, and flexibility when the hauls are relatively short.

Whatever the truck tonnage figures for this year, there is still more-than-ample capacity around. It is worth noting that between 1980 and 1984, the number of regulated motor carriers jumped 70% to more than 30,000. Discounting in some areas isn't all that surprising.

How much discounting? According to a recent survey in *Traffic Management*, about 73% of the shippers surveyed said they were getting discounts on more than 75% of their traffic, with most of the discounts put in the 25-40% range.

While price shading is expected to continue, it doesn't rule out a modest increase on a transaction cost basis. One top industry analyst, for example, pegs the advance at 3% for LTL rates this year and maybe 3.5% in full truckload rates.

■ **Air cargo:** Competition, intensified by disappointing demand, continues to plague the airlines. Demand for domestic air freight ton-miles dropped almost 2% in 1985. But there are signs of a turnaround in recent months as the economy continues to grow. Nevertheless, it would be unrealistic to see more than a 2-4% gain for 1986 (perhaps in the 6.7 billion ton-mile range).

About the only really big growth area in the air sector has been small package shipments. According to the Air Transport Association, more than 192 million small package and express shipments were reported last year—up more than 20% from the previous year.

But the competition is fierce in the small shipment area. Overall revenues went up the same percentage as physical volume because prices didn't rise at all in 1985.

■ **Barge:** The big story here is the huge surplus of ships overhanging the market. A recent Commerce Department study, for example, suggests that without an increase in the rate of dry cargo barge scrappage, overcapacity will probably continue for at least five years (assuming no net addition to the current fleet).

The outlook for tank barges is even worse. Given projected annual growth of 2.2% or less, mostly for inland movement of petroleum products, chemicals, and crude petroleum, overcapacity will continue indefinitely if the current fleet size is maintained.

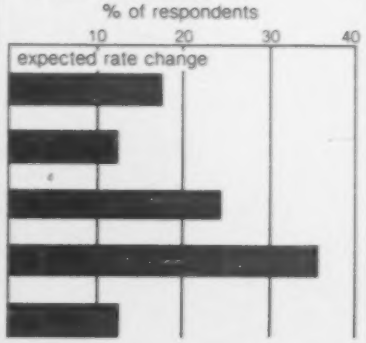
It is no wonder that continued price weakness is noted, with little or no price change anticipated in the current year by *PW* survey respondents.

No matter what the transportation mode or modes used, these same buyers seem determined to keep rates as low as possible. This shows up most clearly in answer to a question on whether shippers were putting increased emphasis on contractual agreements. More than half said "yes"—with a fair number saying that more than half their overall tonnage moves this way. The overall savings? Somewhere in the 5-15% range.

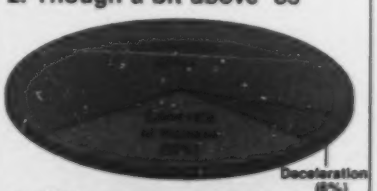
But freight buyers are taking other cost savings approaches, including more use of intermodal service, shifts in transportation modes, the concentration of traffic with a smaller number of carriers, and a rise in the use of transportation specialists such as brokers, shipping associations, and agents. In most cases, the use of specialists is more for better service than for any big price saving. *PW*

What PW freight buyers say

1. 1986 rate increases will be modest



2. Though a bit above '85



3. With more emphasis on contractual agreements

Source: PurchasingWorld

There's energy behind the restraint

Inflation forecasts remain subdued in almost every sector—with a major influence coming from sharply lower energy tags.

If there is any doubt about this, take a look at the new Data Resources Inc. (DRI) quarterly rundown of key commodity groupings. In only one instance is a price advance of more than 5% anticipated for the current year. And several items are actually projected to move lower.

DRI's overall industrial commodity price index forecast—a key purchasing price barometer—points to only a 1.1% increase. That's considerably smaller than just three months ago when a 1.6% increase was projected for this year.

Any subsequent acceleration is also expected to be modest. Overall increases of only 2.6% and 3.6% are seen for 1987 and 1988. These projections are expected to hold, despite the fact that the current demand gains are expected to continue—with 3% real GNP advances anticipated for both years.

A lot of factors are influencing these restrained advances. Average hourly earnings, for example, are projected to rise only 3.1% this year and 4.3% in 1987. And this is before factoring in a productivity offset which is expected to average about 1.5% a year.

Here's a more detailed product-by-product price rundown, as gleaned from the DRI computer printouts prepared for *PW*:

■ **Steel:** Many of the recent price increases seem to be holding. Look for average quarterly increases close to 1.0% this year—resulting in a higher overall level of steel prices of around 3.5% over the next 12-month period ending December 31, 1986. Moreover, stronger economic growth in 1987 and 1988, coupled with quota limitations on imports, should push prices up 3.5% and 4.3% over the next two years.

■ **Nonferrous metals:** Meaningful increases will be delayed until 1986 when stronger construction and transportation markets will combine to firm prices. In any case, count on an escalation rate of 1.8% per quarter between fourth quarter 1986 and fourth quarter 1987—about double the advances anticipated over the next four quarters.

■ **Industrial chemicals:** Held down by declining feedstock costs and stagnant end-market activity, prices in the fourth quarter 1986 will stand a mere 0.1% above year-earlier levels. But some gains are anticipated for the following year (1987)—reflecting steady growth in the construction sector and an end to the drop in feedstock costs. Best bet at that time is for an average 0.8% increase in each quarter of 1987.

■ **Construction materials:** Figure on only modest price escalation—with most of the series monitored by DRI increasing at a compound annual rate of anywhere from 2.5% to 4.5% over the next few years. But tags on energy-intensive products such as bituminous paving materials and gypsum should show little escalation.

■ **Component parts:** Not too much change is seen for the current year—when fasteners and valves and fittings are projected to advance only 0.9% and 1.5%. But next year (1987) could see some fair-sized increases—5.0% for fasteners and 3.7% for valves and fittings.

■ **Machinery:** Modest cost inputs and just so-so demand will keep price increases down. The forecast is for an overall increase of only 2.3% this year and 3.7% and 4.3% in 1987 and 1988. "Oilpatch" machinery will lag even these modest projections, with projections of 0.9% for 1986, 2.0% for 1987, and 2.9% for 1988.

■ **Electronic components:** Continued import pressure from Japan and South Korea, along with excessive production capacity here, will work to restrain price increases through most of the near term. The price index for overall electronic components is targeted to rise just 1.0% this year, followed by 3.3% in 1987 and 3.4% in 1988.

■ **Energy:** More price declines are inevitable following the crude oil price slide. Overall fuel and power costs should be off about 4.7% over the 12-month period ending this December. Gas fuel tags could be off by 6.4% over the same period. And electric power hikes will be held to 1.2% over the same span. ***PW***

Price outlook through 1988
(comparisons of fourth quarter pricing)

Product	Percent change 86/85	87/86	88/87
Raw materials, energy			
Crude materials, ex. fuel & food	3.9	12	2.3
Intermediate materials, ex. food	1.4	3.2	3.8
Industrial chemicals	0.1	3.2	0.4
Gasoline	8.5	1.5	2.9
Metals			
Steel mill products	3.6	4.7	4.8
Galvanized sheet	5.6	5.8	3.2
Steel bars, plates	3.7	3.9	4.0
Steel foundries	3.0	6.2	4.2
Magnesium ingot	2.5	2.5	2.4
Zinc, die cast alloy No. 3	8.2	8.7	3.8
Copper scrap	2.5	8.8	4.5
Aluminum shapes	4.8	6.2	4.3
Components			
Fasteners	0.9	4.6	3.8
Laminated plastic sheets	1.5	4.4	4.0
Corrugated boxes	3.5	4.8	4.8
Transistors	8.2	8.1	6.6
Machine shop products	3.1	3.8	5.0
Construction products			
Prepared paint	2.7	3.2	2.8
Lumber	2.5	3.7	5.6
Heating equipment	3.1	4.1	4.0
Misc. structural metal prod.	2.0	4.0	3.8
Flat glass	1.5	3.7	3.8
Insulation materials	0.5	2.9	3.5
Machinery			
Metalworking machinery	3.3	3.8	4.0
Material handling eqpt.	1.3	2.9	4.1
Special industry machy.	5.0	4.4	5.2
Electrical eqpt.	3.7	4.1	4.2
Trucks	3.0	4.6	4.0

Source: Data Resources, Inc.